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SIZES AND SHAPES OF COINS

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With the stock market gyrating convulsively, interest rates roaring upward and downward, commodities in doubt, and energy in crisis, it seems that more and more people are backing away from the cowboy economy by placing their money and interests in specialized collections of various sorts -- paintings, guns, gems, stamps, coins, etc.

THE URGE TO SPECIALIZE

As you know, people seem to collect everything (a former member of this society collected bridges!; another -- postcards). But in their desire to have an unusual collection, or because of economic or volume restrictions on their accumulation, or because of some limited interest or association -- most collectors specialize by category defined by generally accepted numismatic practice, or as defined by themselves.

So it is with coins. Geographic locations, availability of specimens, housing facilities, temperament and interests of the individual, mintages, history, and economics are some of the factors which influence collectors in their choice of categories.

Some like United States coins, specifically U.S. Cents; more specifically wheat-back Lincoln cents; still more specifically only those which fit in a holed coin page or album. These can be considered as generally accepted categories aided and abetted by commercial considerations.

Others wish to branch out into more imaginative fields and concentrate their time and resources on the more unusual -- perhaps coins depicting ships, errors, corn, prisons, space vehicles, etc. New ones are cropping up all the time.

CATEGORIES

So the fields of coin collecting seem endless, and the combinations of interests almost infinite. However, some of the broad categories of collecting might be described as follows:

- | | | |
|---------------|---|--|
| Geographical | - | Certain cities, nations, areas of the earth. |
| Historical | - | Periods of time or events, date and/or mint series, reigns, personalities. |
| Design | - | Specific subjects such as flowers, birds, maps, etc. |
| Uses | - | General medium of exchange, proofs, patterns, seige pieces, counterfeits. |
| Errors | - | Design mistakes, misspellings, misstrikes. |
| Denominations | - | Usual and unusual, fractional, multiple, decimal, etc. |
| Mintages | - | One to billions and in between. |
| Processes | - | Struck, cast, extruded, rolled, plated, etc. |
| Weights | - | Extremely light to monsterously heavy. |
| Materials | - | Metals, alloys, ceramics, plastics, commodities, etc. |
| Sizes | - | Degrees of dimension or volume. |
| Shapes | - | Mathematically determined, to free form. |

.....and perhaps others. It is to the last two categories that we address ourselves today. But first some definitions.

DEFINITIONS

For my own purposes, I have limited the categories to coins -- to the exclusion of tokens, medals, or barter pieces. Specimens are or were issued by or recognized by some government as a lawful medium of exchange -- though not necessarily portable. Fantasy pieces, patterns, trial strikings and paper currency are excluded.

SIZES

Here again, one must be precise. Size of what? Diameter? Thickness? Volume? Denomination? Weight? Value?

The smallest coin in terms of physical dimensions that I have heard of is the gold fractional Solot of Siam issued from about 1200 to 1757 A.D. It is a 1/6 Solot or 1/12 att piece equal to 1/768 of a silver tical. Its weight is about .019 grams. It is a struck piece, of ring shape, is precisely and symmetrically hammered, and has a partial flower petal design incused into its obverse. These pieces were used in commerce but were usually measured by weight rather than by number.

Of course, if a specific period of time is imposed, other answers come forth. For example, the smallest denomination in circulation at the time of Christ, according to the Bible, was the lepton or widow's mite.

The largest coin in terms of physical dimensions I suppose was the stone money of the island of Yap. A large piece could measure 12 feet in diameter and weigh several tons. A small specimen, about 18 inches in diameter is in the Carnegie Museum collection. It is understood that the exportation of these pieces has now been prohibited.

The largest and heaviest coin now in circulation anywhere in the world is the 20 Balboas piece of the Republic of Panama. It contains a quarter of a pound of silver.

A few statistics comparing these two pieces may be of interest. The large one is 3,897 times the volume of the smaller, and is 6,667 times as heavy. The smaller one, however, is twice as dense and has twice the specific gravity of the larger one.

If one limits himself to United States coinage, the tables would look like this:

<u>Physical Size</u>		<u>Denomination</u>	
<u>Smallest</u>	<u>Largest</u>	<u>Smallest</u>	<u>Largest</u>
Gold one dollar pieces of 1849 to 1889.	Panama Pacific 50 dollar comm. of 1915.	One half cents of 1793 to 1857.	Fifty dollar gold comm. piece of 1915.

<u>Value</u> <u>(Present Market Value)</u>		<u>Artistic Merit</u> <u>(Largely a matter of opinion)</u>	
<u>Smallest</u>	<u>Largest</u>	<u>Smallest</u>	<u>Largest</u>
Common current one cent pieces.	The silver dollar dated 1804.	The clad quarter of 1965 to present.	The St. Gauden's \$20 gold pieces of 1907 to 1933.

Then one could go into other aspects of size. For example, the thinnest, thickest, heaviest, lightest, etc.

SHAPES

Aside from sizes, coins have been formed into many shapes over the last 2800 years. Here are 28 of them:

	<u>Shape</u>	<u>Country</u>	<u>Date</u>	<u>Notes</u>
1.	Square	Curacao	1948	5 cent copper-nickel. Rounded corners.
2.	Rectangular	Siam	1744-1871	Recognized by govt. until 1871.
3.	5 sided	Yemen	1953	1/16 Ahmadi. Good silver (1948-55). Pentagonal.
4.	6 sided	Egypt	1944	2 Piastres. Silver (1942-44). Hexagonal.
5.	7 sided	Great Britain	1969	50 pence. Non circular but constant in breadth. "equilateral curve heptagon". Copper-nickel.

Here is an example of a new shape introduced as recently as 1969. As far as is known, it had never been used in over twenty eight hundred years of coinage. It was introduced in that year to replace a note and at that time was unique among the shapes of coins of the world. Several other countries have since adopted the shape.

6.	8 sided	Egypt	1933	2 1/2 milliemes. Copper-nickel. Octagonal.
7.	8 scalloped	Ceylon	1963	10 cents. Nickel-brass.
8.	10 sided	Colombia	1967	1 Peso. Copper-nickel. Decagonal.
9.	12 sided	Canada	1959	5 cents. Nickel. Magnetic. Duodecimagonal.
10.	12 scalloped	Sudan	1956	10 milliemes. Bronze.
11.	14 Crimps	Ethiopia	1944	25 cents. Quattuordecimagonal.
12.	22 sided	Germany	1920	City of Aacken. 50 pfennig. Iron. Duovigintagonal.
13.	Square-holed	China	c1736	1 cash. Brass.

	<u>Shape</u>	<u>Country</u>	<u>Date</u>	<u>Notes</u>
14.	Round holed	E. Africa	1907	1 cent. Aluminum.
15.	Oblong	Japan	1837-70	100 mon. Brass. Nonparabolic, nonelliptec.
16.	Lump	Travancore	c1795	Silver chakram. It was important that a part of the design showed.
17.	Cup	Turkey	1825	1 para. Silver. Scyphate.
	Interesting	United States	1973	36 - 28 -32
18.	Round	United States	1950 (D)	5 cents. (As have been all regular U.S. coins. There have been octagonal commemoratives and holed patterns.)
19.	Rod	Nigeria	c1960	Ghizi penny valued at 1/10 penny British.
20.	Irregular	Greece	300-400 BC	Temnus. No collar.
21.	Nail	United States	c1880	Question of definition but certainly a medium of exchange.
22.	Bullet	Siam	c1350	1/4 tical. Silver. Basically a folded bar.
23.	Boat	Siam	?	Lat, bar, or boat money of the Mekong Delta.
24.	Incused	Sweden	1961	All incused. Both sides.
25.	Cone shaped	Egypt	117-111 BC	Cast. Obverse smaller than reverse to permit easier mold release. Frustrim or truncated cone.
26.	Ring	Siam	1200-1757	See the tiny gold 1/6 Solot piece.
27.	Wire	Russia	1533-46	1/4 Denga. Coined from silver wire.
28.	Shell	Many Countries	Antiquity to at least World War II	Cypraea shell or Cowrie. Again, a matter of definition since this is an original shell rather than a piece fashioned like it.

Other shapes which exist are:

Circle segment - such as a cut piece.

Plate - such as the Swedish plate money.

Billets - such as brick tea money.

Saddle - of Siam.

Tin hat - of China.

Bracelet - of Africa.

Cylinder - Wampum.

Spear - fish hook pieces.

Animal - Early central Italian coinage.

Insects - Siamese porcelain.

Feathers - of the Solomon Islands.

Sword - of China.

Spade - traced to before 800 BC.

Bell - of Siam.

Yang - Phallic form.

Ring - of Siam and Africa.

Knife - traced to before 850 BC.

Hoe - of China.

Axe - of China.

Fish - of China.

Cross - of China

..... and doubtless many others.

There are, however, shapes that I have not seen or heard of. For example:

Diamond (Lozenge).

Trapezodial.

Pyramidal.

Tetrahedron.

Egg shaped -- either flat or solid.

Parallelogram (other than square or rectangle).

Tear shaped - either flat or solid.

True cube.

True rod, circular

square

oblong

rectangular

shaped

triangular

} Where the diameter or width is less than its thickness.

Hexagram.

Sphere.

Full cone.

Heart.

True gear.

Helix (spiral).

Leaf or plant.

Conoid.

Shield.

Sizes and shapes are but two of the many categories of coins that a person can collect or research. He can limit or expand his activities at little cost, restricted only by his interest and enthusiasm. Photographs of the unobtainable will often suffice where size or economics dictate.

It is not as expensive as you might think. And it may take your mind off the market, the energy crisis, or fear of being nominated as tax avoider of the year. You won't have holes to fill (unless you're also a funeral director) or a set pattern to follow.

However, don't for a moment think you know them all or you'll get about as much sympathy as that afforded a dead curator.

It can be a rewarding adventure leading to much numismatic discussion -- and argument.